

### Abstract of the Disclosure

A magnetic recording medium is formed with a distribution of low coercivity regions functioning as a transition pattern for servo information capable of being sensed by a read/write head by exposing a masked magnetic layer to ions  
5 to change the coercivity of the exposed magnetic layer without substantially affecting the topography of the magnetic layer.

Embodiments of the present invention include forming a series of substantially radially extending low coercivity regions used to divide the magnetic layer into a plurality of sectors comprising substantially concentric  
10 circumferentially extending data tracks by exposing a masked magnetic layer having a high coercivity, i.e. from about 2000 Oe to about 10000 Oe, to one or more heavy atom ion bombardments of gaseous ions, e.g. argon ions, at a dose of about  $1 \times 10^{13}$  atoms/cm<sup>2</sup> to about  $9 \times 10^{15}$  atoms/cm<sup>2</sup> having an implantation energy of about 10 KeV to about 50 KeV.

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